

TELEFAX COVER SHEET

MOSER, PATTERSON & SHERIDAN, LLP

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THIS MESSAGE HAS 12 PAGES INCLUDING THIS SHEET

TO: Commissioner for PatentsFAX NO.: 703-872-9314FROM: Keith Taboada, Esq.DATE: March 2, 2005MATTER: Serial No. 09/925,850 Filed: August 9, 2001DOCKET NO.: 12175-003001/STL9812.00APPLICANT: Mao, et al.

The following has been received in the U.S. Patent and Trademark Office on the date of this facsimile:

☐ Petition
☐ Disclosure Statement & PTO-1449
☐ Priority Document
☐ Drawings (sheets) Informal
☐ Amendment
☒ Resubmission of Response to Notice of
Non-Responsive Reply (2 pages)

☐ Transmittal Letter (2 copies)
☐ Fee Transmittal (2 copies)
☐ Deposit Account Transaction
☒ Facsimile Transmission Certificate
dated March 2, 2005

CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. §1.8

I hereby certify that this correspondence is being transmitted by facsimile to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 2, 2005.
Facsimile No. (703) 872-9314.

Allyson M. DeVesty
Name of person signing this certificate

Allyson M. DeVesty 3-2-05
Signature and date

345251

Resubmission of
Response to Notice of Non-Responsive Reply
Serial No. 09/925,850
Page 1 of 2

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

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MAR 02 2005

PATENT APPLICATION

Applicant: Mao, et al.

Case: 12175-003001/STL9812.00

Serial No.: 09/925,850

Filed: August 9, 2001

Examiner: Ometz, David Louis

Group Art Unit: 2653

Confirmation No.: 3814

Title: **HIGH SENSITIVITY TUNNELING GMR SENSORS WITH SYNTHETIC
ANTIFERROMAGNET FREE LAYER**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

S I R:

**RESUBMISSION OF RESPONSE TO NOTICE OF NON-RESPONSIVE
REPLY DATED JUNE 10, 2004**

In response to Examiner Ometz's telephone request of March 2, 2005, attached please find a copy of the Response to Notice of Non-Responsive Reply filed June 17, 2004, including the PTO Auto-Reply Facsimile. Although Applicants believe that no fee is due in connection with this response, the Commissioner is hereby authorized to charge counsel's Deposit Account No. 20-0782 for any fees, including extension of time fees or excess claim fees, required to make this response timely and acceptable to the Office.

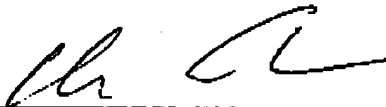
345180

Resubmission of
Response to Notice of Non-Responsive Reply
Serial No. 09/925,850
Page 2 of 2

If the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

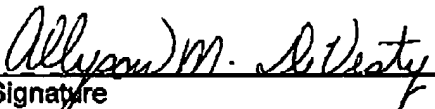
Mar 2, 2005
Date


Keith P. TABOADA
Attorney Reg. No. 45,150
(732) 530-9404

MOSER, PATTERSON & SHERIDAN, LLP
595 Shrewsbury Avenue
Suite 100
Shrewsbury, NJ 07702

CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. 1.8

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Signature
Allyson M. DeVesty
Printed Name of Person Signing
3-2-05
Date of signature

Auto-Reply Facsimile Transmission



TO:

Fax Sender at +17325309808

Fax Information

Date Received:

Total Pages:

6/17/2004 3:53:23 PM [Eastern Daylight Time]

7 (including cover page)

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Received
Cover
Page

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Jun-16-2004 06:54am From: Moser, Patterson & Sheridan, LLP - US +17325309808 To: (1) 6/17/2004 3:53pm

TELEFAX COVER SHEET

MOSER, PATTERSON & SHERIDAN, LLP
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THIS MESSAGE HAS 7 PAGES INCLUDING THIS SHEET

TO: Commissioner, Re Patent
FAX NO.: 703-877-9306
FROM: Felix Tidridge, Esq.
DATE: June 17, 2004
MATTER: Serial No. 02/224,879 Re: August 9, 2001
DOCKET NO.: 12172-000001/ATT.0812.00
APPLICANT: Mos. et al.

The following has been received in the U.S. Patent and Trademark Office on the date of this facsimile:

<input type="checkbox"/> Public	<input type="checkbox"/> Transmitted Letter (2 copies)
<input type="checkbox"/> Disclosure Statement & PTO-100	<input type="checkbox"/> Fee Transmitted (2 copies)
<input type="checkbox"/> Priority Document	<input type="checkbox"/> Deposit Account Transaction
<input type="checkbox"/> Drawings (<input type="checkbox"/> none) Informal	<input checked="" type="checkbox"/> Facsimile Transmission Certificate
<input type="checkbox"/> Amendment	<input checked="" type="checkbox"/> dated 6/17/2004
<input checked="" type="checkbox"/> Response to Notice of Non-Responsive Reply	<input checked="" type="checkbox"/> Envelope A (4 pages)
<input type="checkbox"/> (2 pages)	

CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. 1.11

I hereby certify that this correspondence is being transmitted by facsimile to Mos. et al. Amendment, Characterization for Patent, P.O. Box 1450, Alexandria, VA 22313-4450 on June 17, 2004. Facsimile No. 02/224,879.

Attorney in Charge
Name of person signing this certificate

Felix Tidridge
Signature and date

22/021

PAGE 02 * RCVD AT 06/17/2004 05:01:53 PM [Eastern Standard Time] * SVR:USPTO-EFAX-1/2 * DNIS:8729314 * CSID:732 530 9808 * DURATION (mm-ss):03:48

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THIS MESSAGE HAS 7 PAGES INCLUDING THIS SHEET

TO: Commissioner for Patents

FAX NO.: 703-872-9306

FROM: Keith Taboada, Esq.

DATE: June 17, 2004

MATTER: Serial No. 09/925,850 Filed: August 9, 2001

DOCKET NO.: 12175-003001/STL9812.00

APPLICANT: Mao, et al.

DOCKETED

The following has been received in the U.S. Patent and Trademark Office on the date of this facsimile:

☐ Petition
☐ Disclosure Statement & PTO-1449
☐ Priority Document
☐ Drawings (____ sheets) informal
☐ Amendment
☒ Response to Notice of Non-Responsive Reply
(2 pages)

☐ Transmittal Letter (2 copies)
☐ Fee Transmittal (2 copies)
☐ Deposit Account Transaction
☒ Facsimile Transmission Certificate
dated June 17, 2004
☒ Exhibit A (4 pages)

By SPM

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Allyson M. DeVesty
Name of person signing this certificate

Allyson M. DeVesty 6-17-04
Signature and date

282321

Confirmation Report - Memory Send

Page : 001
 Date & Time: Jun-16-2004 03:58pm
 Line 1 : +17325309808
 Line 2 : +17325309808
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 Machine ID : Moser, Patterson & Sheridan, LLP - NJ

Job number : 088
 Date : Jun-16 03:53pm
 To : 219-17038729306
 Number of pages : 007
 Start time : Jun-16 03:53pm
 End time : Jun-16 03:56pm
 Pages sent : 007
 Status : OK

Job number : 088

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THIS MESSAGE HAS 7 PAGES INCLUDING THIS SHEET

TO: Commissioner for Patents
 FAX NO.: 703-872-9306
 FROM: Kath Taborda Esq.
 DATE: June 17, 2004
 MATTER: Serial No. 09/925,830 Filed: August 9, 2001
 DOCKET NO.: 12174-003001/STL9812.00
 APPLICANT: Mao, et al.

The following has been received in the U.S. Patent and Trademark Office on the date of this facsimile:

☐ Petition
☐ Disclosure Summary & PTO-1449
☐ Priority Document
☐ Drawings (sheets) informal
☐ Amendment
☒ Responses to Notice of Non-Responsive Reply
 (2 pages)

☐ Transmittal Letter (2 copies)
☐ Fee Transmittal (2 copies)
☐ Deposit Account Transaction
☒ Facsimile Transmission Certificate
 dated June 17, 2004
☒ Exhibit A (4 pages)

CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. 51.8

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Allyson M. DeVenty
 Name of person signing this certificate

Allyson M. DeVenty 6-17-04
 Signature and date

282221

Response to Notice of Non-Responsive Reply
Serial No. 09/925,850
Page 1 of 2

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

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MAR 02 2005

PATENT APPLICATION

Applicant: **Mao, et al.**

Case: **12175-003001/STL9812.00**

Serial No.: **09/925,850**

Filed: **August 9, 2001**

Examiner: **Ometz, David Louis**

Group Art Unit: **2653**

Confirmation No.: **3814**

Title: **HIGH SENSITIVITY TUNNELING GMR SENSORS WITH SYNTHETIC
ANTIFERROMAGNET FREE LAYER**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

S I R:

RESPONSE TO NOTICE OF NON-RESPONSIVE REPLY DATED JUNE 10, 2004

In response to the Notice of Non-Responsive Reply mailed June 10, 2004, please enter Exhibit A inadvertently omitted with the Reply filed on March 30, 2004. Although Applicants believe that no fee is due in connection with this response, the Commissioner is hereby authorized to charge counsel's Deposit Account No. 20-0782 for any fees, including extension of time fees or excess claim fees, required to make this response timely and acceptable to the Office.

282319

Response to Notice of Non-Responsive Reply
Serial No. 09/925,850
Page 2 of 2


REMARKS

This response is intended as a full and complete response to the Notice of Non-Responsive Reply. Specifically, accompanying this Response is Exhibit A in support of the inventors' Declaration filed on March 30, 2004. Thus, the Applicants submit that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

June 17, 2004
Date

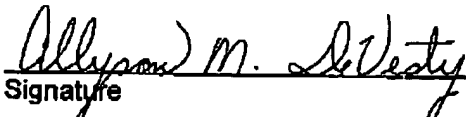


Keith P. TABOADA
Attorney Reg. No. 45,150
(732) 530-9404

MOSER, PATTERSON & SHERIDAN, LLP
595 Shrewsbury Avenue
Suite 100
Shrewsbury, NJ 07702

CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. 1.8

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Signature
Allyson M. DeVesty

Printed Name of Person Signing
6-17-04

Date of signature

282319

EMPLOYEE INVENTION DISCLOSURE FORM

(Inventors report an invention with this form to the Intellectual Property Department)

(Mail Stop: SV15B1, QNTA, SHK2LG, or OKM157)

(Please obtain required management signature first)

(Note: the Intellectual Property Dept. will provide these materials to the cognizant Vice President)

SEAGATE
Docket No.
Review Board
Technical Area

1. TITLE (7 words or less) TGMR head with SAF free layer to improve sensitivity

2. BRIEF DESCRIPTION (40 words or less)

A novel structure of SAF is added in to a TGMR head which is stabilized by a layer of AFM. The sensitivity and thermal stability against the thermal fluctuation are improved.

- Attach a problem-solution description of the invention sufficient to file a provisional application.
- Attach results of an electronic search related to the inventive concept on techlib.seagate.com or similar search engine.
- Identify any related Seagate patent dockets.
- Identify any related publications or patents from the inventors or third parties.

3. INVENTOR A: Sining N/A Mao 91879 P.R.China
 First Name FULL Middle Name Last Name Empl. No. Citizenship
 Residence Address 13927 Aquila Ave, Savage, MN 55378 Fac. Code NRW110
 Div. Code 045 Dept. No. 71011 Office Phone (612) 844-7909 Manager Ed Murdock
 Design Center Vice Pres. Mike Covault

INVENTOR B: JANUSZ JOZEF NOWAK 93176 POLISH
 First Name FULL Middle Name Last Name Empl. No. Citizenship
 Residence Address 7350 GALLAGHER DR #248A EDINA, MN 55435 Fac. Code NRW110
 Div. Code 045 Dept. No. 71011 Office Phone 952 844 8556 Manager Sining Mao
 Design Center Vice Pres. Mike Covault

(Identify as an "inventor" anyone who made a material contribution to the conception of the invention. Use additional forms as needed.)

4. CONCEPTION OF INVENTION

First oral disclosure on [redacted] by Sining Mao To Janusz Nowak
 First written description on [redacted] by Sining Mao In Seagate Engineering Log Book 2553 pp 92
 (Please attach evidence of work on this invention, e.g., copies of log book pages, print outs from Lotus Notes presentations, reports, etc.)

5. REDUCTION TO PRACTICE

First model built by: Eric Litville on [redacted] at NRM, Cvd16
 First tests conducted by Janusz Nowak on [redacted] at [redacted]

6. PUBLICATION OF DESCRIPTION, SALES, AND USES OF INVENTION

Publications and dates wherein the invention is or will be described

Has the invention been disclosed outside the company?

Yes: ☐ No: ☒ If so, attach a detailed explanation.

Products in which the invention is or will be used and date of first use:

Jupiter

Have any of the above products been or scheduled to be delivered or announced?

Yes: ☐ No: ☒

If yes, when?

7. SIGNATURES OF INVENTORS

(Additional co-inventors are identified on attached forms)

[Signature] [redacted]
 Inventor A Date
[Signature] [redacted]
 Inventor B Date

8. MANAGEMENT SIGNATURES

[Signature] [redacted]
 Immediate Manager Date
[Signature] [redacted]
 Date

SEAGATE CONFIDENTIAL

EMPLOYEE INVENTION DISCLOSURE FORM
 (Inventors report an invention with this form to the Intellectual Property Department)
 (Mail Stop: SV15B1, QNTA, SHK2LG, or OKM157)
 (Please obtain required management signature first)
 (Note: the Intellectual Property Dept. will provide these materials to the cognizant Vice President)

SEAGS12
Docket No. 1
Review Board
Technical Area

1. TITLE (7 words or less) TGMR head with SAF free layer to improve sensitivity

2. BRIEF DESCRIPTION (40 words or less)

A novel structure of SAF is added in to a TGMR head which is stabilized by a layer of AFM. The sensitivity and thermal stability against the thermal fluctuation are improved.

- Attach a problem-solution description of the invention sufficient to file a provisional application.
- Attach results of an electronic search related to the inventive concept on techlib.seagate.com or similar search engine.
- Identify any related Seagate patent dockets.
- Identify any related publications or patents from the inventors or third parties.

3. INVENTOR A: Eric Shane Liuville 092505 USA
 First Name FULL Middle Name Last Name Empl. No. Citizenship
 Residence Address 2021 Creekside Way, St. Paul, MN 55119 NRW110
 Div. Code 045 Dept. No. 71011 Office Phone 92 (844-8927) Manager Sining Mao
 Design Center Vice Pres. Mike Covault

INVENTOR B: Jian Chen 732/4 P.R. China
 First Name FULL Middle Name Last Name Empl. No. Citizenship
 Residence Address 1576 Hartley Blvd. S. Shakopee, MN 55379 NRW110
 Div. Code 045 Dept. No. 71013 Office Phone 952-844-8835 Manager Juan Fernandez de Castro
 Design Center Vice Pres. Mike Covault

(Identify as an "inventor" anyone who made a material contribution to the conception of the invention. Use additional forms as needed.)

4. CONCEPTION OF INVENTION

First oral disclosure on [redacted] by Sining Mao To Janusz Nowak
 First written description on [redacted] by Sining Mao In Seagate Engineering Log Book 2953 pp 92
 (Please attach evidence of work on this invention, e.g., copies of log book pages, print outs from Lotus Notes presentations, reports, etc.)

5. REDUCTION TO PRACTICE

First model built by: Eric Liuville on [redacted] at NRM, cvc16
 First tests conducted by Janusz Nowak on [redacted] at [redacted]

6. PUBLICATION OF DESCRIPTION, SALES, AND USES OF INVENTION

Publications and dates wherein the invention is or will be described

Has the invention been disclosed outside the company?

Yes: ☐ No: ☒ If so, attach a detailed explanation.

Products in which the invention is or will be used and date of first use:

Jupiter

Have any of the above products been or scheduled to be delivered or announced?

Yes: ☐ No: ☒

If yes, when?

7. SIGNATURES OF INVENTORS

(Additional co-inventors are identified on attached forms)

Eric Liuville
 Inventor A

Date

Immediate Manager

Date

[Signature]
 Inventor B

Date

Mike Covault

8. MANAGEMENT SIGNATURES

SEAGATE CONFIDENTIAL